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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,638	02/24/2005	Martin Hofmeister	27392/26949	2118
4743 7590 02/13/2007 MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606			EXAMINER DESTA, ELIAS	
			ART UNIT 2857	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/525,638

Applicant(s)

HOFMEISTER, MARTIN

Examiner

Elias Desta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Response to Amendment

1. Applicant's arguments, see amendment, filed December 13, 2006, with respect to the rejections of claims 1-9 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. The Examiner acknowledges the cancellation of claims 2 and 3. However, upon further consideration, a new ground(s) of rejection is made in view of 35 U.S.C. 101 statutory requirements. Examiner acknowledges the newly added claims 10-24.

Explanation of Rejection

Claim Objection

2. Claims 4, 12 and 19 recite the limitation "the value of the absolute value" in page 2, 2nd to 3rd line, page 4, 2nd line, and page 6, 2nd line respectively. There is insufficient antecedent basis for this limitation in the claims.

Claim rejection - 35 U.S.C. 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent

therefor, subject to the conditions and requirements of this title.

4. Claims 1 and 4-24 are rejected the claimed invention is directed to non-statutory subject matter. The claimed invention as a whole does not produce a "useful, concrete and tangible" result.

In reference to claims 1, 10 and 18: The method for determining an envelope curve of a modulated signal does not have a tangible result. The step of "forming values of an absolute value of inverse-transformed samples" does not amount to a tangible outcome. "Forming values of an absolute value" may be useful to measure and display the envelope curve of a modulated input signal, but the claims in the current form as a whole do not represent a "useful, concrete and tangible" output. At best, the claims represent interim steps that are useful to measure an envelope curve of a given modulated signal.

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. Referring to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete."

In the instant case, the step of “forming values of an absolute value of the inverse transformed samples” does not constitute a tangible result. However, the outcome is useful and has a potential to do something tangible if it is carried out by further process where the “[formed] values of an absolute value of the inverse transformed samples” are used in constructing “an envelope curve of a modulated signal”. Further, the output has to be realized in some tangible output format. The outcome should be used in a real-life process, such as displaying a measurement of an envelope curve of a modulated input signal. However, in the absence of a “useful, concrete and tangible” result, the claims are deemed to be non-statutory.

In reference to claims 6, 8, 9, 15, 17 and 23-24: the digital storage medium and the computer program noted in the claims do not represent functional descriptive material and they do not represent statutory process since they are not performing the steps noted in the independent claims. There is no functional relationship established among the program, the memory and the processor. Therefore, they are considered nonfunctional descriptive material.

Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural

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and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Therefore these claims simply recite nonfunctional descriptive material (see MPEP 2106.01 [R-5] Computer-Related Nonstatutory Subject Matter). In the instant case, there is no functional relationship established among the program, memory and processor.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Reveyrand et al. (IRCOM Article, 'A Calibrated Time Domain Envelope Measurement System for the Behavioral Modeling of Power Amplifiers') teaches a method for setting up generation and calibration of time domain measurements of complex envelopes of modulated signals at both ports of non-linear microwave amplifiers.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elias Desta.
Examiner
Art Unit 2857

-Ed

- January 18, 2007


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800